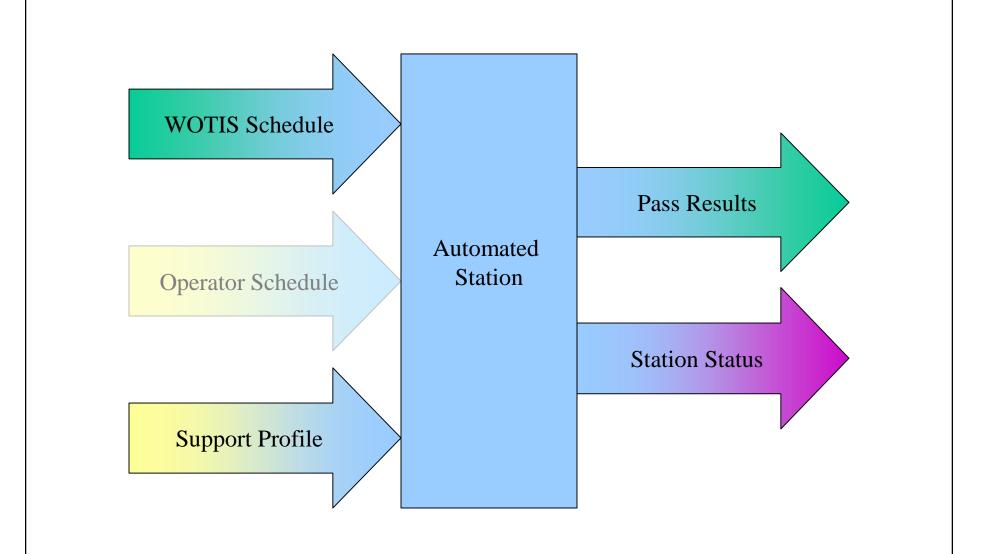


# **Automation Operations Concept**

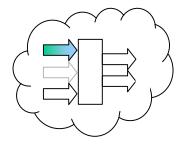






#### WOTIS Schedule → Automated Station





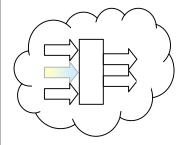
Schedule and ephemeris data is compiled at the scheduling office and forwarded to the Automated Tracking Station.

- ➤ No operator action is required.
- ➤ An operator <u>can</u> view the operational schedule and the Master's list of "things to do".



## Operator Schedule → Automated Station





An operator <u>can</u> modify, insert, or delete events on the operational schedule.

- ➤ Modification involves changing the start and/or stop time for the event.
- ➤ Insertion involves entering, using a Windows GUI, all "typical" schedule information for the event, including the ephemeris data.

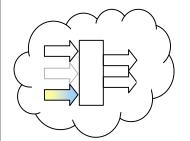
Mean Julian date, X, Y, Z, X, Y, Z

➤ Deletion involves selecting the event to be deleted and confirming the deletion.



### Support Profile → Automated Station





An operator defines the tracking station configuration for each anticipated support (satellite/antenna/operation).

The following information must be provided by an operator using a Windows GUI:

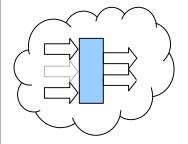
- Support characteristics
  - Satellite, ID Code, operation, frequencies, data formats, etc.
- ➤ Antenna requirements
  - Antenna, setup/start/stop allowances, configuration
- Resource requirements, including the configuration for all devices

  Number of units, requested units, setup/start/stop allowances, etc.
- > Test procedures to be performed prior to the support Not yet defined.



#### **Automated Station**





An operator can monitor the status of the tracking station and control all automated tracking station resources.

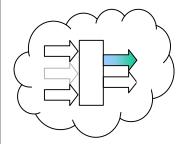
- An operator <u>can</u> use a Windows GUI to access a wide range of status information.
- An operator <u>can</u> use a Windows GUI to exercise full control of all automated devices.

\*\*\*No operator = no fault resolution\*\*\*



#### Automated Station → Pass Results





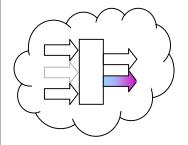
The automated tracking station generates pass results information and shipping reports and delivers the reports to WOTIS.

- ➤ Pass results are automatically generated and forwarded to WOTIS.
- > Generation and forwarding of shipping reports must be initiated by an operator.



### Automated Station → Station Status





A customer can monitor the status of an automated tracking station during a support.

➤ No operator action is required.



## **Automation Operational Requirements**



- ✓ The equipment must be powered on and in remote mode (if applicable).
- ✓ The Masters and Nodes must be powered on and the automation software must be running on all workstations.

There is a documented standard operating procedure for bringing up the Master and Node computers.

- ✓ One Master must be designated as the Scheduling Master.
- ✓ One Master must be designated as the Reporting Master.
- ✓ The 11 meter antenna software must be running and no user other than the Master may be in upgrade status.

Users may be logged in to the antenna.

✓ A support profile must exist for <u>every</u> anticipated support (satellite/antenna/operation).